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REPORTS

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Safety & Environmental

Solutions, Inc.

Fasken Oil and Ranch

Felmont Collier Pit Closure Report

Lea County, New Mexico February 4, 2000

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I. Physical Description

The subject site is an old pit area approximately 100' X 100' situated adjacent to a lease road and well at the Felmont Collier lease located in Section 9 Township 11S Range 33E in Lea County, New Mexico. (Vicinity Map) The land is privately owned.

II. Background

The subject site was discovered during an inspection with New Mexico Oil Conservation Division (NMOCD) personnel in the fall of 1999. Safety & Environmental Solutions, Inc. (SESI) was engaged in September1999 to perform a site assessment of the pit area. This assessment was performed in response to a request from the NMOCD District Office.

The results of the assessment have been reported previously in the document entitled "Fasken Oil and Ranch Site Assessment Felmont Collier Site, Section 9 Township 11S Range 33E, Lea County, New Mexico" dated October 25, 1999.

On December 29, 1999, Fasken Oil and Ranch received approval, with conditions, of the Work Plan submitted to the NMOCD on October 26, 1999.

III. Work Performed

The implementation of the approved work plan commenced on January 17, 2000. Excavation was begun moving outwards from the original excavation. The north side of the excavation was delineated first with field testing for Total Petroleum Hydrocarbons (TPH) performed utilizing a General Analysis Corporation Mega-TPH Analyzer, Serial #01169, calibrated on December 23, 1999 (See Field Analytical Results), moving to within 8' of the temporary fence. The east side was excavated and delineated next with field testing for TPH expanding from the originally excavated area 28' feet to the east.

The south side was delineated with field TPH testing next with the southwest corner moving slightly farther south than the southeast corner. A temporary ramp was built on the west side to facilitate removal of the impacted soils in the bottom of the pit area. The areas north and south of the ramp on the west side were excavated and delineated with field TPH testing. The vertical extent of the contamination was determined at this time, with the final excavated area being 96' from north to south in length and 100' from east to west in width. Further excavation on the bottom area then commenced.

On January 20, 2000 an estimated amount of clean fill was determined for the liners based upon the area of the excavation. At this time 810cy of clean fill was hauled onto the site and stockpiled to the east of the affected area and 958cy of highly contaminated rock and soils was hauled to the Gandy Marley Landfarm, an NMOCD approved facility, for disposal.

Excavation continued on the bottom of the pit area to a depth of approximately 25'. Field testing at this depth revealed TPH levels in the 700ppm range in a hardened, sandy limestone strata. Mr. Bill Olson of the NMOCD Santa Fe office was contacted concerning the contamination levels present at this depth, the area excavated to this point and the close proximity of three pipelines to the north, east and west-southwest. Mr. Olson consented to stop any further excavation of the bottom area based upon these criteria.

The ramp area was then removed and the outside extent of the excavated area was sloped with a bench 5' deep and 5' wide to facilitate the placement of the top liner in an umbrella pattern as designated in the approved Work Plan. The bottom of the excavated area was lined with clean soils and leveled. The bottom 20ml liner was placed upon the clean soils and covered with additional clean soils to protect the integrity of the liner. Once this was accomplished, the contaminated soils were backfilled into the excavated area in a mounded configuration to within 3' of the surface. Field testing for TPH and for Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX), utilizing a Photovac MicroTIP MP-100 Photoionization Detector that was calibrated with Isobutylene prior to each use, was performed periodically on the spoils as they were returned to the excavated area to ensure compliance with 5000ppm level for TPH outlined in the approved Work Plan.

Once the impacted soils were mounded into their final configuration, the top 20ml liner was placed over the pile and the area was backfilled to grade with the clean soils hauled onsite. These soils were blended with existing topsoil to further enhance seed germination. A BLM blend seed mix will be used at this site to promote growth and a smooth merger with native fauna.

IV. Conclusion

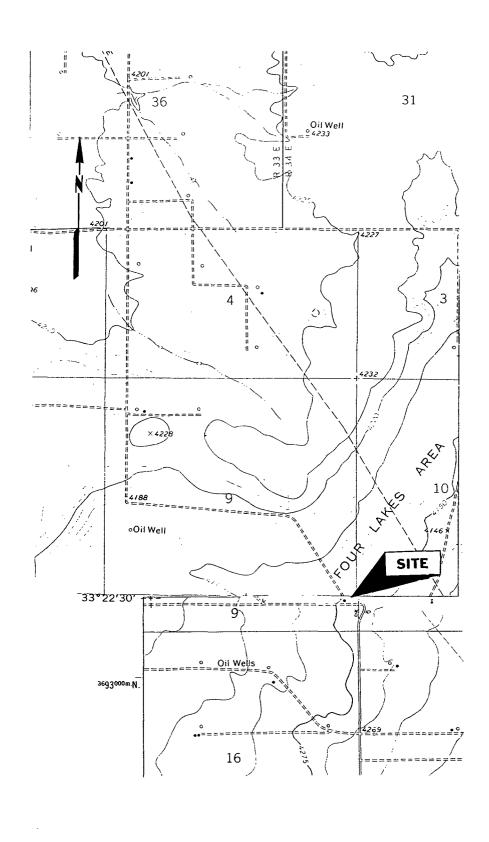
All worked completed at this site conformed to the Work Plan as approved and to the modification as allowed by Mr. Olson, the state official handling this project, from the NMOCD Santa Fe office.

V. Maps and Figures

Vicinity Map
Site Plan
Photographs
Field Analytical Results

Fasken Oil and Ranch

Figure 1 Vicinity Map

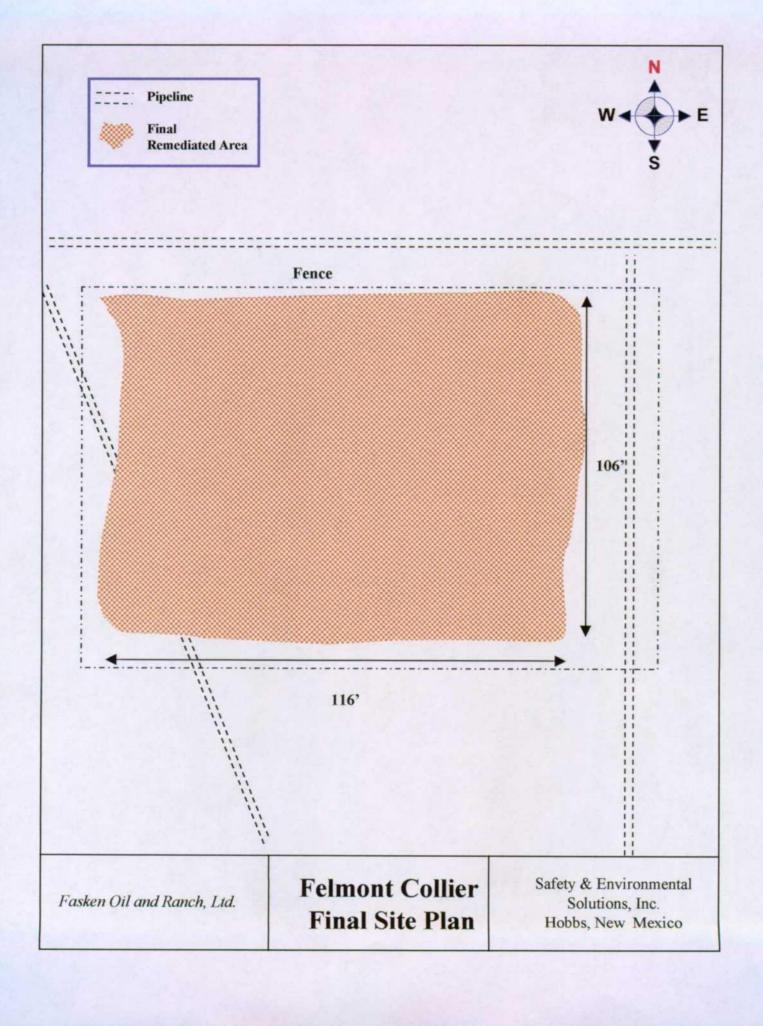


Fasken Oil and Ranch, Ltd.

Felmont Collier Site Vicinity Map Safety & Environmental Solutions, Inc. Hobbs, NM

Fasken Oil and Ranch

Figure 2 Site Plan



Fasken Oil and Ranch

Figure 3 Photographs



Felmont Collier - During Excavation of Pit Area



Felmont Collier - During Excavation of Pit Area



Felmont Collier - Bottom Area Facing Southwest



Felmont Collier - Clean Soils and East Spoils Pile



Felmont Collier - West Spoils Pile



Felmont Collier - Bottom Facing Northeast



Felmont Collier - Bottom Facing South



Felmont Collier - Bottom Liner Facing Northeast



Felmont Collier - Mounded Area Facing North



Felmont Collier - Top Liner Facing North



Felmont Collier - Site Final Facing West



Felmont Collier -Site Final Facing West

Figure 4 Field Analytical Results

Felmont Collier Site

Field TPH and BTEX Test Results

Fasken Oil and Ranch

Date	Time	Location	Number of Sample	of Sample TPH	
			Points in Composite	(ppm)	(ppm)
1/19/00	9:40pm	South Bottom @ 15'	20	2800	n/a
1/19/00	10:00am	North Bottom @ 15'	20	3000	n/a
1/20/00	8:00am	North wall	20	109	n/a
1/20/00	8:15am	North Half of East Wall	20	134	n/a
1/20/00	8:30am	South Half of East Wall	20	198	n/a
1/20/00	9:00am	East 40' of South Wall	20	600	n/a
1/21/00	2:00pm	South Wall (East 60')	20	435	n/a
1/21/00	2:10pm	South Wall (West 20'_	20	2812	n/a
1/21/00	4:00pm	Southeast Bottom @ 24'	20	662	n/a
1/21/00	4:15pm	North Half Bottom @ 18'	20	3900	n/a
1/24/00	2:10pm	North Half of West Wall	20	292	n/a
1/24/00	2:20pm	North Half Bottom at 24'	20	756	n/a
1/24/00	2:35pm	Southwest Bottom @ 18'	20	1860	n/a
1/24/00	3:30pm	West Spoils Pile	50	3590	n/a
1/25/00	10:00am	Southwest Bottom @ 25'	20	484	n/a
1/25/00	10:20am	Southwest Corner Walls	20	481	n/a
1/25/00	10:35am	West Wall Ramp Area	20	3300	n/a
1/25/00	11:00am	East Spoils Pile	50	2750	n/a
1/25/00	3:30pm	West Wall Ramp Area	20	787	n/a
1/31/00	9:40am	East Spoils 1st Blend	50	3349	37.5
1/31/00	10:50am	East Spoils 2nd Blend	50	1786	23.9
1/31/00	11:30am	West Spoils 1st Blend	50	2476	25.8
1/31/00	12:55pm	West Spoils 2nd Blend	50	2368	21.9
1/31/00	2:00pm	West Spoils 3rd Blend	50	976	19.7

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